

**State of California  
Air Resources Board**

**Potential Mine Methane Capture Compliance Offset Protocol  
Fourth Meeting of the Technical Working Group**

**Cal/EPA Headquarters Building  
Sierra Hearing Room  
1001 I Street, Sacramento, California 95814**

**July 10, 2013  
10:00 am – 12:00 pm PDT**

Conference call-in number: 1-888-989-5309  
Passcode: 24516

Technical working group meeting agenda and materials posted at:  
<http://www.arb.ca.gov/cc/capandtrade/protocols/mmcprotocol.htm>

## AGENDA

- 1) Inclusion of Non-Methane Hydrocarbons (NMHCs) in GHG assessment boundary  
Existing protocols:
  - CAR Protocol (underground mine drainage and VAM projects): CO<sub>2</sub> emissions from the combustion of NMHC are included in emission reduction quantification if NMHC comprise more than 35,000 mg/m<sup>3</sup> of extracted CMG or more than 3,500 mg/m<sup>3</sup> of ventilation air
  - CDM Methodology (underground mine drainage and VAM projects) plus methodology revisions (VCS to include abandoned mines and RCE to include surface mines): CO<sub>2</sub> emissions from the combustion of NMHC are included in emission reduction quantification if NMHC comprise more than 1% of the extracted CMG
  - RCE Draft Protocols (abandoned and surface mine projects): CO<sub>2</sub> emissions from the combustion of NMHC are included in emission reduction quantification if NMHC comprise more than 1% of the extracted CMG
  - The GHG assessment boundary in each of the above methodologies only includes the CO<sub>2</sub> emissions resulting from the combustion of NMHC while excluding the venting of NMHC in the baseline and project emissions. It has been suggested that this results in an overly conservative quantification of emission reductions. See industry proposal, distributed separately.
- 2) Using elevated nitrogen content of extracted gas as metric for a well being considered 'mined through'
  - RCE draft surface protocol uses a 5% elevation of nitrogen levels from baseline as a sign that the well is communicating with the mine face. This is one way of defining a well as mined through.
  - Can this parameter be effectively applied to pre-mining surface wells at underground mines?
- 3) Fugitive emissions and the role of destruction device efficiencies and other accounting methods
  - Fugitive from processing (dehydrators, separators)
  - Fugitive from gas enrichment systems (compressors)
  - Fugitive from pipeline injection (leakage from pipeline after injection)
- 4) Potential project expansion
  - Addition of newly drilled or currently venting wells to existing drainage systems
  - Addition of new drainage system (pre-mining surface well, pre-mining in-mine borehole, gob well)
  - Addition of new methane destruction equipment
- 5) Open floor (if time permits). Otherwise, you may reach Jessica Bede via the contact info below and comments may be submitted upon release of draft protocol language.

## PROGRAM CONTACTS

Jessica Bede, Staff Lead for Mine Methane Capture Compliance Offset Protocol

[jbede@arb.ca.gov](mailto:jbede@arb.ca.gov)

916-324-0311

Greg Mayeur, Manager, Program Operations Section

[gmayeur@arb.ca.gov](mailto:gmayeur@arb.ca.gov)

916-324-8031

Steve Cliff, Chief, Program Evaluation Branch

[scliff@arb.ca.gov](mailto:scliff@arb.ca.gov)

916-322-7194